

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-79 (canceled)

Claim 80 (new): A method for selecting an object in a three-dimensional modeling environment, the method comprising the steps of:

determining a position of a cursor in a three-dimensional modeling environment, the environment containing one or more virtual objects;

providing a two-dimensional representation of the cursor and at least one of the virtual objects; and

selecting a virtual object based on a positional correspondence of the selected object and the cursor in the two-dimensional representation.

Claim 81 (new): The method of claim 80, wherein the position of the cursor corresponds to a position of an input device in real space.

Claim 82 (new): The method of claim 81, wherein the input device is user-controlled.

Claim 83 (new): The method of claim 81, wherein the input device has at least six degrees of freedom.

Claim 84 (new): The method of claim 81, wherein the input device is a haptic device.

Claim 85 (new): The method of claim 84, wherein the haptic device is adapted to apply a force to a user when the cursor coincides with the object in two of three dimensions.

Claim 86 (new): The method of claim 85, wherein the force is a friction force.

Claim 87 (new): The method of claim 80, wherein the selecting step comprises selecting a virtual object upon issuance of a user command at a time when the cursor coincides with the object in two of three dimensions.

Claim 88 (new): The method of claim 80, further comprising the step of applying a mathematical transformation to determine the positional correspondence.

Claim 89 (new): The method of claim 80, wherein the two-dimensional representation is a two-dimensional view.

Claim 90 (new): The method of claim 89, wherein the two-dimensional view is a selected one of a perspective view and an orthogonal view.

Claim 91 (new): The method of claim 80, wherein the providing step comprises providing a first view of the cursor and at least one of the virtual objects in a first two-dimensional display space and a second view of the cursor and at least one of the virtual objects in a second two-dimensional display space, wherein the first and second display spaces correspond to different planes of the three-dimensional modeling environment.

Claim 92 (new): An apparatus that permits a user to select an object in a three-dimensional modeling environment, the apparatus comprising:

an input device that provides user input to a computer;

computer software that, when operating with the computer and the user input, determines a position of a cursor in a three-dimensional modeling environment and selects a virtual object in the modeling environment based on a two-dimensional positional correspondence of the object and the cursor.

Claim 93 (new): The apparatus of claim 92, wherein the input device has at least six degrees of freedom.

Claim 94 (new): The apparatus of claim 92, wherein the input device is a haptic device.

Claim 95 (new): The apparatus of claim 94, wherein the haptic device is adapted to apply a force to a user when the cursor coincides with the object in two of three dimensions.

Claim 96 (new): The apparatus of claim 95, wherein the force is a friction force.